THE SIZES and LENGTHS OF RIGGINGS

For all the

STATES SHIPS and FRIGATS.

AS ALSO

Proportions of *Boatſwains* and *Carpenters* Stores, of all Kinds, for Eight Months Sea-Service upon the Coaſt of *England*:

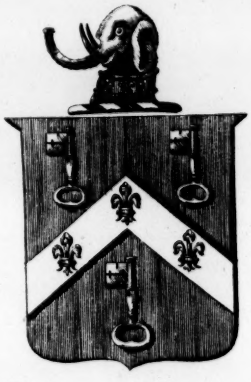
Together with ſundry other uſeful Obſervations, as may appear by the Index following.

Performed by *Edward Hayward*, Clerk of the Survey at *Chatham*.

LONDON:

Printed by *Peter Cole*, living in *Leaden-Hall*, and at the ſign of the Printing-preſs in Cornhil, neer the Royal Exchange. 1655.

£450



Robert Parker, F.A.S.

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Mr Turner.

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Storekeeper at Deptford
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large [illegible] reference,
to him & wife & the [illegible]
of his family.

Only Royal Society copy (this date) known
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This copy says, "This was never published."
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a presentation copy from the
author to Robert Hooke!

* "This was not published &
can not be bought"

Thurſday, the 8th *of* Feb. 1654.

At the Council at White-Hall.

Ordered

BY His Highneſs, *The Lord Protector*, with the Advice of his Council, That no perſon or perſons, do on any pretence whatſoever, Print, or Reprint a Book intituled, *The Size and Length of Riggings, &c. With Proportions of Boatſwains and Carpenters Sea-ſtores, for all the States Ships and Frigats, &c.* other than *Peter Cole* of *London*, Printer and Stationer, who is to print the ſame for the uſe of the Author thereof, *Edward Hayward*, Clerk of the Survey at *Chatham* in *Kent*, and for no other perſon whatſoever: And that neither the ſaid *Edward Hayward*, nor the ſaid *Peter Cole*, ſhall ſell, or diſpoſe of any of the ſaid Books that ſhall be ſo printed, to any perſon or perſons, other than to his Highneſs and Council, and the Officers of the Admiralty and Navy reſpectively, without ſpecial Licenſe, on that behalf, from the Council, or Commiſſioners of the Admiralty.

W. Jeſſop, *Clerk of the Council.*

Copia vera,
Ex. per W. J.

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C. 175. dd. 23.

To His Highneſs,

OLIVER,

LORD PROTECTOR

OF

England, Scotland, and Ireland:

With the Dominions thereunto belonging.

May it pleaſe your Highneſs,

THE Subject of this Book being an Extraction of that Nature as was never formerly extant in the Navy; and the Invitations being prevalent to make that Publick which heretofore was kept ſecret, I could do no leſs in Duty, than offer my Pains and Naval Obſervations unto Your Highneſs in the firſt place.

It was once far above my thoughts (I muſt confeſs) to tender this Work (becauſe mean) to ſo Eminent a Perſonage, till I conſidered it was Yours de Jure; *and that very Motive put upon me ſo great confidence: Let me therefore beſeech Your Highneſs to accept it in good part, from one who Cordially deſireth all Welfare and Tranquility to Your Highneſs, and the three Nations under Your Protection. It would I hope be only matter of Information, if this ſhort Tract might be worthy of Publick View; however, it ſhall ſatisfie me though it go no further than your Highneſs, and Honorable Council have already deſigned it, to whoſe Pleaſures I freely ſubmit, remaining,*

Your Highneſs Servant, in all
Humility and Faithfulneſs,

Chatham, Feb. 14. 1654.

E. HAYWARD.

OLIVER.

To the Right Honorable,

GENERAL DISBROWE,

And the reſt of the *Commiſsioners* for Mannaging the Affairs of the *Admiralty* and *Navy*.

Right Honorable.

I Could do no leſs than tender unto your Honors, your eſpecial Intereſt in this Book, becauſe one main inducement in committing it to the Preſs, was to give your Honors ſatisfaction, that the Ships are fitted regularly with Riggings, and Stores, in reference to Boatſwains and Carpenters, and not hand over head without caution. Beſides, I owe much to You in particular, who were pleaſed to make an Addition unto my ſmal Sallery, about a yeer ſince, and intreat your Honors to accept this Mite of my humble Thankfulneſs, being an Effect of your Encouragement.

By that time your Honors have throughly inſpected the Particulars, I doubt not but you will diſcern that it is a careful and ſerious work to mannage; and yet to know all theſe Proportions and Rules notionally, will not accompliſh a man for this Imployment, for the main part lies in the diſcreet execution of the Duty, and underſtandingly to trace all Accompts, and to take exact ſurveyes, the want of judgment wherein, and the neglect whereof, may loſe the State a conſiderable Sum in the Yeer: Therefore let me beſeech your Honors to encourage Intelligent Clerks in the Navy, it will oblige them to Faithfulneſs and Induſtry, and be a means to avoid confuſions, which otherwiſe will happen by entertaining thoſe which are not ſuch.

Thus commending my Labors to your Honors Peruſal, I remain

At Your Honors Commands,

Chatham, Jan. 31. 1654.

E. HAYWARD.

To the Right Worſhipful,

The Commiſsioners of the Navy.

Right Worſhipful,

AS *it was the Injunction of ſome of You, by Your Order, the twelfth of* January *laſt, to have the Proportions of Riggings and Stores for the States Ships, proper to Boatſwains and Carpenters; ſo it was my deſire, not only to gratifie you with thoſe Rules by which I acted, but with ſome other Additional Obſervations; and becauſe I am not able, by reaſon of ſome diſability of Body, to tranſcribe many Copies, therefore I committed them to the Preſs, eſteeming my ſelf happy in the occaſion, that I might not only teſtifie my thankfulneſs in the Bulk for your many Civilities towards me, but particularly for your favorable recommendation of me to the Right Honorable, the Commiſsioners of the Admiralty, about a Yeer ſince, for an augmentation of my ſmal Sallery, where I met with expected ſucceſs.*

I muſt confeſs much of this hath been my own Pains, and part hereof is borrowed Experience; for I have adviſed with the Maſters Attendant, and other men in their reſpective places, many a time, both heretofore, and of late, before I could bring this Work to perfection.

Upon the exact peruſal of the Book, you may perhaps conclude, That the Riggings hold not punctually for every Ship of a Rank; I grant, they may differ a little in ſome reſpects; but in my Judgment, no neerer way can be laid down, for method and brevity: and therefore he that hath the fitting out of any Ship or Frigat in particular muſt be ſo conſiderate, as to compare his Rules with the Ship in hand, and ſo vary the ſize and length accordingly: Nay, he that is a Clerk in that buſineſs, ought to be very circumſpect and watchful, otherwiſe the State may be abuſed: As in two Inſtances inſtead of many more, which might be given. A Boatſwain comes for Rigging, the Clerk not knowing his Duty, gratifies his deſires; ſuch a thing I ſay may be to the diſadvantage of the publick: But as a prevention, this courſe is taken by me; Before I make out the Rigging, I conſult my Survey Book, and require his demand; when I have it, then I compare my own Rules thereby, where he exceeds, I ſhorten, and where it is ſhorter than my Directions, I let it paſs, unleſs it be to the ſpoiling of a Rope; and I am apt to beleeve that many are ſo ſerv'd, and yet will not complain to diſcover their own ignorance. Again, When a Ship is fitted to Sea with much new Rigging, there ought to be a ſpecial

care

care at her return, to observe that old Ropes were not put up instead of new; and herein the Clerk who hath the Book in his hand, must have judgment to discern as well as the Master Attendant; otherwise in that particular also the State may be wronged.

And when all is done in reference to Enquiries, Experience must be the best guide, as to Riggings; For I have observed that Rules of Art, which many Marriners are apt to give, and plead for (as in the fifty nine Page of this Book) do not hold punctually, though they are not to be rejected; and therefore the measuring of particular Ships Riggings, is the surest Foundation.

You may also please to take notice, That Proportions of Stores (as in this Book) cannot alwaies hold the same, for they may and must differ, with respect to the Service in hand; and remote imployments will necessarily require an increase of Provisions.

Thus leaving the following Matter to your view, at your best leisure, I remain

At your Worships Commands,

Chatham, Feb. 1. 1654.

E. HAYWARD.

AN

AN INDEX.

THe Unite, or figure of 1. in the first Column, from the 1 page, to the end of the 13. doth contain the Rigging of the Soveraign.

Number 2. in the second Column, in like manner, contains the rigging of the Resolution; wherein the Naseby Frigat may be included for equality of length, but the sizes are somwhat less.

Number 3. in the third Column, contains the riggings of the Tryumph, George, Andrew, James, Swiftsure.

Number 4. in the fourth Column, contains the riggings of the Victory, Rainbow, Vauntguard, Parragon, Unicorn.

Number 5. in the fifth Column, contains the riggings of the Lyon, Entrance.

Number 6. in the sixth Column, contains the riggings of the Providence, Expedition.

Number 7. in the seventh column, contains the rigging of the Xth Whelp.

Number 8. in the eighth column, contains the riggings of the Nichodemus, and such other smal Pinnaces.

The Unite, or figure of 1, from the first column of the 17. page, to the end of the 29 page, contains the riggings of the Speaker, Fairfax, Torrington, Newberry, Lime Frigat, Marston moor, Worcester, Langport, Plimmouth, Bridg-water, Tredaugh, Essex.

Number 2. in the second column of the same page, and so on to the 29. contains the riggings of the, Bristol, Lawrel, Yarmouth, Winsby, Nantwich, Taunton, Jerzy, Dragon, Dover, Tygre, Advice, Elizabeth, Reserve, Phœnix, Gainsborough, Nonsuch, Saphire, Adventure, Centurian, Newcastle, Portland, Diamond, Ruby, Kentish, President, Foresight, Assistance, Maidston, Preston, Portsmouth, Pellican, Hampshire, Assurance.

Number 3. in the third column of the 18. page, and so on to the 30. contains the riggings of the Nightingale, Primrose, Pearl, Meremaid, Baling, Colecheſter, Faggons, Islip, Grantham, Selby.

Number 4. in the fourth column of the same page, and so on to the end of the 30. page, contains the riggings of the Marlin, Drake, Martin, Paradox, Sparrow, Waymouth.

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Bow-ſprit

		Soveraign. 1		*Reſolution.* 2	
		Inch.	*Fath.*	*Inch.*	*Fath.*
Bowſprit	Pennants for ſheats	6	24	6	24
	Falls for the ſame	4½	60	4½	60
	Clulines	3	50	3	46
	Garnets	3½	60	3	52
	Lifts	4	60	3	60
	Pennants for braces	4	6	4	6
	Falls for the ſame	2½	60	2½	60
	Halliards	4½	40	4	36
	Tye	7	14	6	14
	Buntlines	3	60	3	40
	Horſe	6	10	6	10
Spritſ-topmaſt	Shrouds	3	28	3	28
	Laniards	2	15	1¾	15
	Pennants for braces	2½	4	2½	4
	Falls for them	2	48	1½	40
	Tye	3	5	3	4
	Halliards	2	15	2	15
	Clulines	2½	36	2	36
	Pennants for back-ſtaies	3	6	3	6
	Falls for the ſame	2	30	2	30
	Lifts	2	30	2	28
	Parrel ropes	2	6	2	5
	Puttocks	3	14	3	12½
	Pennants for tackles	3	3	3	3
	Falls for them	2	18	2	18

Tryumph, &c. as by the Ind. 3		Victory, &c. as by the Ind. 4		Lyon, Entrance. 5		Providence, Expedition. 6		Xth Whelp. 7		Nichodemus. 8	
Inch.	Fath.	Inch.	Fath.	Inch.	Fath.	Inch.	Fath.	Inch.	Fath.	Inch.	Fath.
5 1/2	20	5 1/2	20	4 1/2	16	4	14	3 1/2	8	2 1/2	22
4	56	3	44	3	44	2 1/2	32	2 1/2	30		
3	40	2 1/2	30	2	26	2	26	2	26	1 1/2	26
3	52	3	52	2 1/2	40	2 1/2	34	2	26		
3	60	3	56	2 1/2	40	2	34	2	32	2	39
3	5	3	5	2 1/2	5	2 1/2	5	2 1/2	4	2	4
2 1/2	56	2 1/2	40	2	36	2	32	2	30	1 1/2	30
3 1/2	34	3 1/2	32	3 1/2	32	3	24	2 1/4	22	2	15
6	12	6	9	5	9	4 1/2	9	4	9		
2 1/2	36	2 1/2	36	2	30	2	26	1 1/2	20		
5 1/4	9	5 1/4	9	5	7	4	5	3	4	2 1/2	7
2 1/2	24	2 1/2	15	2	15	2	14	1 1/2	8		
1 3/4	15	1 1/2	9	1	6	1	6	1	6		
2	4	2	3	1 1/2	3	1 1/2	3	1 1/2	2		
1 1/2	36	1 1/2	24	1 1/2	24	1	16	1	16		
3	4	2 1/2	3	2	3	2	3	1 1/2	2 1/2		
2	12	2	10	1 1/2	8	1 1/2	6	1 1/2	5		
2	36	2	30	1 1/2	30	1 1/2	20	1	18		
2 1/4	6	2	4	1 1/2	3	1 1/2	3	3/4	3		
1 3/4	30	1 1/2	24	1	24	1	22	1	16		
1 1/2	24	1 1/2	15	1 1/2	12	1 1/2	11	1	11		
1 3/4	5	2	3	1 1/2	3	1	4	1 1/2	3		
2 1/2	12	2	12	2	10	2	8				
2 1/2	3	2	2 1/2								
1 3/4	18	1 1/2	14								

		Soveraign. 1		Reſolution. 2	
		Inch.	Fath.	Inch.	Fath.
Fore-maſt.	Pennants for tackles	8	24	7½	24
	Runners for tackles	5½	100	5	87
	Falls for them	4	200	3	182
	Shrouds	8	234	7½	208
	Laniards	4	90	4	80
	Standing Back-ſtayes	8	26	7½	26
	Laniards	4	10	4	10
	Stay	15	17	13	16
	Laniard to the ſtay	5	12	5	12
	Tye	8	26	7½	22
	Halliards	6	65	6	50
	Jeers	6½	100	6	90
	Lifts	4	80	3½	80
	Parrel ropes	5	18	5	15
	Breſt ropes	8	8	7	8
	Sheats	6	100	6	90
	Tacks	8½	60	8	56
	Bow-lines	4½	70	4½	70
	Bridles	4½	18	4	14
	Pennants of braces	4	8	3½	8
	Falls to them	3	70	3	60
	Clu-garnets	3½	80	3	80
	Bunt-lines	3	150	3	150
	Runners of Martnets	3	48	2½	48
	Falls of Martnets	2½	100	2½	95
Fore Topmaſt	Pennants for tackles	4½	5	4	5
	Falls to them	2½	30	2	28
	Shrouds	4½	75	4	70
	Laniards	2	30	2	27
	Puttocks	5	60	4½	60
	Stay	5	17	5	15
	Pennant of the laniard	4	6	3½	30
	Fall of the Laniard	3½	24		

Tryumph, &c. as by the Ind. 3		*Victory, &c.* as by the Ind. 4		*Lyon, Entrance.* 5		*Providence, Expedition.* 6		*Xth Whelp.* 7		*Nicbodemus.* 8	
Inch.	Fath.	Inch.	Fath.	Inch.	Fath.	Inch.	Fath.	Inch.	Fath.	Inch.	Fath.
7	16	6	16	5	12½	5	8	5	5½	4	6
5	55	5	51	4	46	4	24	4	20	2½	50
3½	115	3½	95	3	95	3	48	3	46		
6½	178	6	154	5½	114	5	90	4½	75	3½	64
4	64	3	56	3	48	2½	45	2	30	2	28
7	22	6	21	5½	19½	5	18	4½	15		
4	10	4	10	3½	10	3½	10	3	6		
12	14	11	13	9	12	7	10	6½	10	4	12
5	10½	4½	10	4	10	3½	7	3	5	2	5
7	21	7	21	6	16½	6	16	5	12	4	10
6	48	5	45	4½	40	3½	38	3	38	2	32
6	48	6	35	4	30	4	27				
3¼	60	3	60	3	60	2½	56	2	49	2	36
4½	15	4½	15	4	15	4	15	3	8	2½	8
6½	6	6	5	5	3						
5	83	5	60	4½	60	4	52	3½	46	2½	36
7	40	7	40	5½	40	5	34	4½	28	3½	24
4	50	3½	40	3½	40	3	40	3	28	2½	24
3½	12	3	10	3	7	3	6½	2	5	2	6
3	8	3	8	2½	7	2½	6	2½	4	2	6
2½	50	2½	48	2	36	2	32	2	32	1½	36
3	76	2½	76	2	40	2	40	2	40	1½	42
2½	130	2½	130	2	82	2	72	2	56	1½	38
2½	36	2½	36	2	36						
2½	88	2½	80	2	80						
3½	4½	3	4	2½	4	2½	4				
2	28	2	28	1½	23	1½	16				
3¾	67½	3½	52	3	44	3	40	2½	29	2	18
2	27	2	24	1½	20	1½	20				
4½	54	4	40	3½	32	3	30	2¾	19		
5	15	4½	15	4	13	3	12	3	10	2½	12
3½	6	3	4	2½	4	2½	4	1¾	16	1½	8
2½	18	2½	12	2½	10	2½	10				

		Soveraign.		Reſolution.	
		1		2	
		Inch.	Fath.	Inch.	Fath.
Fore-topmaſt,	Tye	6	10	5½	10
	Runner of the Halliards	5½	20	5	20
	The fall to them	4	66	3½	66
	Standing back-ſtaies	5	40	4½	36
	Laniards to them	2½	12	2½	12
	Running back-ſtaies	4	12	4	12
	Falls to them	3	52	3	48
	Lifts	2½	72	2½	46
	Bowlines	2¾	84	2½	84
	Bridles	2½	14	2	14
	Pennants for braces	3	6	3	5
	Falls to them	2½	80	2	75
	Pennant of the top-rope	8	16	7	14½
	Fall of the ſame	5½	50	5	44½
	Sheats	7	68	6	64
	Clulines	3½	80	3	80
	Parrel-ropes	4	10	3	10
	Buntlines	3½	40	3	36
Fore topgal-lant maſt	Pennants of tackles	2½	6	2½	5
	Falls of tackles	2	30	1½	24
	Shrouds	2½	30	2	30
	Laniards	1½	18	1¼	18
	Puttocks	3	20	2½	16
	Pennants of back-ſtaies	2½	8	2½	7
	Falls of back-ſtaies	2	74	1½	70
	Top-rope	3½	36	3	30
	Stay	2¾	30	2½	30
	Laniard	1¾	9	1¾	9
	Tye	3	6	3	5
	Halliards	2	42	1½	38
	Lifts	2	30	1½	28
	Pennants of braces	2	4	2	3
	Braces	1½	70	1	70
	Clulines	2	65	1½	65
	Bowlines and bridles	2	75	1½	65
	Pénants & fals of cranlines	2½	50	2	47
	Parrel-ropes	2	5	2	4

Tryumph, &c. as by the Index	*Victory, &c.* as by the Ind.	*Lyon, Entrance.*	*Providence, Expedition.*	*Xth Whelp.*	*Nichodemus.*
3	4	5	6	7	8
Inches, Fath.	*Inch. Fath.*	*Inch. Fath.*	*Inch. Fath.*	*Inch. Fath.*	*Inch. Fath.*
5½ — 8	5 — 7	4 — 6½	3½ — 5	3½ — 5	2½ — 6
4½ — 17	4 — 16	3½ — 15	3½ — 15	3 — 15	
3 — 52	3 — 40	2½ — 30	2½ — 30	2 — 30	2 — 18
4½ — 33	4 — 32	3½ — 28	3 — 28	2½ — 24	
2½ — 10	2½ — 10	1½ — 8	1½ — 6	1½ — 4	
3½ — 12	3½ — 10	3½ — 10	3 — 10		
3 — 44	3 — 44	2½ — 40	2 — 38		
2½ — 41	2 — 32	1½ — 32	1½ — 32		
2½ — 75	2½ — 73	2 — 60	1½ — 60	1¾ — 56	1½ — 44
2½ — 14	2½ — 12	2 — 8	1½ — 8		
2½ — 5	2½ — 5	2 — 5	2 — 5	2 — 5	1½ — 4
2 — 66	2 — 66	1½ — 56	1½ — 44	1½ — 36	1 — 36
7 — 14	6½ — 14	6 — 10			
5 — 38	5 — 28	4 — 24	4½ — 30	3½ — 25	2½ — 16
6 — 60	6 — 60	5 — 53	4 — 50	3 — 40	2½ — 30
3 — 72	3 — 70	2½ — 64	2 — 60	2 — 50	2 — 34
3 — 8	3 — 8	3 — 6	2½ — 4	2 — 4	1½ — 3
2½ — 36	2½ — 36	2 — 36	2 — 30		
2 — 4					
1¼ — 20					
2 — 22	2 — 21	2 — 15	1½ — 12	1½ — 10	
1¼ — 15	1¼ — 12	1 — 8	1 — 8	1 — 6	
2 — 16	2 — 12	2 — 12	1½ — 9		
2 — 8	2 — 7				
1½ — 68	1½ — 64				
3 — 30	2½ — 28	2½ — 14	1½ — 12		
2½ — 27	2½ — 25	2 — 30	1½ — 24	1½ — 15	
1¾ — 9	1½ — 7				
2¾ — 5	2½ — 4	2 — 17	1½ — 17	1½ — 17	
1½ — 24	2 — 24				
1½ — 24	1½ — 24	1½ — 12	1¼ — 12	1 — 12	
1½ — 3	1½ — 3	1½ — 3	1½ — 3	1½ — 3	
1 — 64	1 — 64	1 — 64	1 — 52	1 — 46	
1½ — 46				1 — 16	
1½ — 60	1½ — 60	1½ — 60	1½ — 55	1 — 40	
1½ — 24					
2 — 3	1½ — 2	1½ — 2			

		Soveraign. 1 Inch.	Fath.	Reſolution. 2 Inch.	Fath.
Main-Maſt	Pennants of tackles	8½	40	8	40
	Runners of tackles	6	132	5½	87
	Falls of tackles	4	260	3½	182
	Shrouds	8½	280	8	243
	Laniards	4½	100	4	100
	Standing back-ſtaies	8½	28	8	28
	Laniards	4½	10	4	10
	Stay	17	25	16	23
	Coller of the ſtay	16	12	15	11
	Laniard of the ſtay	6	16	5½	16
	Lifts	4½	94	4	90
	Tacks	9½	60	9	58
	Sheats	6½	100	6½	96
	Bowlines	5½	80	5	80
	Bridles	4½	24	4½	24
	Pennants of braces	4	12	4	12
	Falls of braces	3	88	3	84
	Clugarnets	4	90	3½	90
	Tye	9	29	8	25
	Halliards	6½	90	6	80
	Jeers	8½	100	8	100
	Parrel-ropes	6	35	6	34
	Breſt-ropes	8	12	7	12
	Runners of Martnets	2½	110	2½	60
	Falls of Martnets	3	110	2¾	120
	Bunt-lines	3½	230	3½	204
	Pennant of the garnet	8½	14½	8	14
	Guy	6	18	5½	18
	Fall of the garnet	4½	45	4	40
Main Top-maſt	Pennants of tackles	5	12	5	12
	Falls of tackles	2½	70	2½	70
	Shrouds	5	96	5	90
	Laniards	2½	42	2½	42
	Standing back-ſtaies	5	44	5	40
	Laniards	3	14	3	14
	Running back-ſtaies	5	17	5	17
	Falls	4	60	3½	60
	Stay	8	20	7	18
	Laniard	4	12	4	12
	Lifts	3½	64	3	60

Tryumph, &c. 3		*Victory, &c.* 4		*Lyon, &c.* 5		*Provid. &c.* 6		*X^th Whelp.* 7		*Nichodemus.* 8	
Inches,	*Fath.*	*Inch.*	*Fath.*	*Inch.*	*Fath.*	*Inch.*	*Fath.*	*Inch.*	*Fath.*	*Inch.*	*Fath.*
7	18	6½	18	6	16	5½	16	5	16	4	8
5	56	5	56	4½	48	4½	20	4	20	?	
3½	115	3½	110	3½	104	3	48	3	48	2½	60
7½	216	7	207	6½	147	5½	111	5	105	4	96
4	90	3½	90	3	65	3	60	3	48	2½	35
7½	24	7	22	6½	21	5½	19	5	16		
4	10	3½	10	3½	10	3	10	2½	8		
15	20	15	19	14	18	10	17	8	14	6	14
13	9	12	9	11	9	9	5	8	5	5	5
5½	16	5	16	4	12	4	9	3½	8	3	6
3½	80	3½	72	3	70	3	70	2½	54	2	42
8½	46	8	44	6½	30	6	30	5	26	4	32
6	90	6	88	5	64	4½	48	4	45	3	46
4½	60	4½	60	4	48	4	45	3	28		
4	18	4	16	3½	14	3½	12	3	12	2½	42
3¾	10	3½	10	3	8	3	8	2¾	8	2½	8
3	76	3	60	2½	60	2½	60	2	38	2	42
3	78	3	76	2½	64	2½	60	2	48	2	48
7½	23	7½	22	6½	22	5½	16	5	16	4	20
6	60	6	55	5	52	4½	44	3½	36	2½	38
7	92	6	42	5½	40	5	30				
5	27	5	24	4½	15	4	15	3	12	3	10
6	8	6	6	5	5						
2½	40	2½	28	2	28	2	20				
2¼	80	2	68	2	60	2	60				
3	176	2½	176	2	100	2	95	2	54	2	40
7½	9	7	9	6	9	5	9	4½	8	4	8
5	13	5	13	4½	10	4	9	3½	8	3½	8
4	38	4	36	3½	30	3½	26	3	26	3	26
4½	6	4	5	3½	4½	3	4	2¾	3	2	4
2½	42	2½	30	2	26	2	20	1½	20	1½	20
4¼	92	4	70	4	60	3	60	3	45	2½	27
2¼	36	2	30	2	30	2	30	1½	20	1	20
5	40	4	38	3½	33	3	32	2½	32	2½	30
3	12	2½	10	2½	10	2	8	2	8	1½	8
4½	16	4	12	3½	12	3	12	2½	9		
3½	48	3	46	2½	44	2½	36	2	28		
6	16	5	16	5	14½	4½	13	3½	11	2½	17
3½	12	3½	9	3	6	3	5	2¾	5	2	5
2½	54	2½	40	2	38	2	38	1¾	34	1	42

		Soveraign. 1 Inch.	Fath.	Reſolution. 2 Inch.	Fath.
Main Top-maſt	Pennants for Braces	3	7	3	7
	Falls to them	2½	85	2½	80
	Bowlines	4½	80	4	80
	Bridles	4	22	3½	22
	Pennant of the Top-rope	8½	20	8½	20
	Fall of the ſame	6	65	5½	65
	Sheats	8	90	7½	80
	Clulines	4½	100	4	98
	Tye	8½	12	8	10
	Runner of the Halliards	6	24	5	22
	Fall of the Halliards	4	60	3½	58
	Parrel Ropes	4	12	3½	12
	Bunt-Lines	4	100	4	58
	Puttocks	5	88	5	80
Main Top-gallant Maſt	Pennants of tackles	3	8	3	5
	Falls of tackles	2½	32	2	30
	Shrouds	3	46	3	36
	Laniards	1¾	24	1½	24
	Puttocks	3½	36	3	28
	Pẽnants of rũning backſtays	3	9	3	9
	Their Falls	2	88	2	86
	Stay	3	20	3	20
	Laniard of the Stay	2½	6	2½	6
	Pennants for braces	2½	5	2½	5
	Braces	2	80	1½	80
	Bowlines	2½	80	2	76
	Bridles	2	12	1½	12
	Parrel-ropes	2½	8	2	7
	Top-rope	4½	43	4	36
	Flag-ſtaff Stay	2½	25	2	24
	Tye	3	7	3	7
	Halliards	3	65	2½	60
	Clulines	2	80	2	50
	Lifts	2½	30	2	30

Tryumph, &c. as by the Index	*Victory, &c.* as by the Ind.	*Lyon, Entrance.*	*Providence, Expedition.*	*Xth Whelp.*	*Nichodemus.*
3	4	5	6	7	8
Inch. Fath.	Inch. Fath.	Inch. Fath.	Inch. Fath.	Inch. Fath.	Inch. Fath.
3 — 6	3 — 6	2½ — 6	2½ — 6	2 — 6	1½ — 4
2½ — 76	2 — 70	2 — 64	2 — 56	1¾ — 39	1½ — 43
3¾ — 66	3½ — 66	3 — 60	3 — 48	2¾ — 39	
3 — 18	3 — 16	2 — 14	2 — 10	2 — 8	2 — 58
8 — 18	7½ — 16	6 — 12	5½ — 9	4½ — 8	
5½ — 44	5½ — 36	5 — 32	5 — 32	4½ — 31	3 — 24
6½ — 80	6 — 76	5½ — 70	5 — 56	4½ — 36	3 — 38
3¼ — 84	3 — 80	2½ — 64	2½ — 64	2 — 54	2 — 42
7 — 9	6 — 8	5½ — 7	5 — 7	4½ — 7	3 — 7
5 — 20	5 — 18	4 — 18	3½ — 18	3½ — 12½	2½ — 16
3½ — 58	3½ — 50	3 — 50	3 — 40	2¼ — 32	2½ — 24
3½ — 10	3½ — 7	3 — 6	3 — 6	2½ — 6	2 — 6
3 — 54	2¾ — 54	2½ — 48	2 — 30	2 — 26	1½ — 26
4½ — 63	4½ — 54	4 — 48	3½ — 48	3 — 25	3 — 24
2½ — 4	2 — 3	2 — 3	2 — 3		
1½ — 28	1½ — 16	1½ — 10	1½ — 9		
2½ — 32	2 — 32	2 — 18	2 — 18	1½ — 14	
1½ — 20	1½ — 17	1½ — 12	1½ — 9	1 — 7	
2½ — 25	2 — 20	2 — 16	2 — 16	1½ — 14	
2½ — 8	2 — 8	2 — 6	2 — 6		
1¾ — 85	1½ — 62	1 — 60	1 — 56		
3 — 27	2½ — 25	2 — 23	2 — 22		
2¼ — 6	2 — 4	2 — 3	2 — 3	1½ — 17	
2 — 5	2 — 3	1½ — 60	1½ — 56	1 — 51	
1¼ — 70	1¼ — 66				
1¾ — 64	1½ — 66	1½ — 60	1½ — 56	1 — 45	
1¼ — 9					
2¼ — 6	2 — 5	2 — 5	1¾ — 4	1½ — 2	
3½ — 34	2½ — 30	2 — 14	2 — 13		
1½ — 19	1½ — 19	1 — 22	1 — 21		
3 — 5	2½ — 4½	2 — 74	2 — 64	1½ — 18	
2 — 60	2 — 40				
1¾ — 48	1½ — 40	2 — 24	1½ — 24	1 — 24	
1½ — 28	1½ — 24	1½ — 24	1 — 24	1 — 14	

		Soveraign. 1		Reſolution. 2	
		Inch.	Fath.	Inch.	Fath.
Mizon maſt,	Pennants of tackles	5½	16	5	12
	Runners	4	50	3½	50
	Falls of tackles	3	80	3	80
	Shrouds	5½	144	5	132
	Laniards	3	48	2½	48
	Tye	7	11	6½	10
	Halliards	5	50	4½	50
	Stay	6	15	5	14½
	Laniard	3½	6	3	6
	Sheat	4	30	3½	22
	Jeer	5½	42	5	40
	Truſs	3½	40	3	40
	Bowlines	4	20	3	20
	Brails	2½	210	2½	186
	Parrel ropes	5½	7	5	7
Croſsjack,	Lifts	4	66	3½	60
	Braces	2½	60	2½	52
	Pennants	3½	6	3	6
	Halliards	4	40	3½	32
Mizon top-maſt	Pennants of tackles	3½	8	3	7
	Falls of tackles	2½	36	2¼	30
	Shrouds	3	55	3	46
	Laniards	2	25	1½	20
	Puttocks	3½	30	3	30
	Pennants of Braces	2½	4	2½	4
	Braces	2	45	2	40
	Bowlines	2½	50	2	46
	Bridles	2	12	1½	10
	Clulines	2	80	2	66
	Tye	3	7	3	7
	Halliards	2½	36	2½	34
	Lifts	2½	38	2	36
	Top-rope	4	35	3½	32
	Parrel ropes	3	6	2½	6
	Pennant of the Stay	3	20	3	18
	Runner	2½	15	2½	14
	Parts of the Stay	2	60	2	60
	Pennants for Back-ſtaies	3	12	2½	10
	Falls	2½	40	2	36

Tryumph, &c. 3		*Victory, &c.* 4		*Lyon, &c.* 5		*Providence,* 6		*Xth Whelp.* 7		*Nichodemus.* 8	
Inch.	*Fath.*	*Inch.*	*Fath.*	*Inch.*	*Fath.*	*Inch.*	*Fath.*	*Inch.*	*Fath.*	*Inch.*	*Fath.*
4½	6	4	6								
3½	40	3	22								
2½	46	2½	36								
4¾	95	4½	95	3½	65	3	48	2½	48	2½	24
2½	40	2½	40	2	40	2	40	1½	28	1½	14
6	8½	6	7	5	6½	5	6½	4½	6		
3½	29	3	25	2½	20	2½	20	2	14		
4	12	3½	10	3½	7	3½	7	3	7	2½	8
2½	5	2½	5	2	5	2	5	1½	4	1½	3
3	20	2½	16	2½	13	2½	12	2½	10	2	8
4	27	3½	25	3½	20						
2½	22	2½	18	2	15	2	15	1½	10		
2	15	2	12	2	10	2	10	1¾	9	1½	56
2	129	2	126	2	101	2	60	1½	40		
4	7	3	6	3	5	3	5	2½	4	2	4
2½	58	2½	48	2	40	1½	36	1	30		
2	48	2	32	1½	30	1	28	1½	28		
2½	6	2¼	5	2	3	1½	3				
3	30	3	30	2½	20						
2½	6	2½	6								
2¼	30	2	22								
2½	42	2½	40	2	24	1½	18	1	12		
1½	20	1½	20	1½	16	1	9	1	6		
2½	25	2½	25	2	12	1½	6	1½	6		
2	4	1½	3	1½	3	1½	3	1½	2		
1¾	40	1½	32	1	32	1	28	1	26		
1¾	42	1½	26	1½	26	1½	26	1	26		
1¾	10										
1¾	56	1½	42	1½	30	1½	30	1	28		
3	7	2½	5½	2½	4	2½	4	2	3		
2	34	2	30	1½	14	1¼	14	1	14		
1¾	30	1½	26	1½	24	1	21	1	18		
3½	28	2½	22	2	16	1½	14				
1¾	6	1¾	6	1½	4	1½	3	1½	2		
2¼	18	2	10	1½	8	1½	6				
2	13										
1½	56	1½	50	1	50	1	44				
2½	10										
1¾	34										

	Sovereign. 1 Inch. Fath.	Reſolution. 2 Inch. Fath.
Cat-ropes { Pennants	7 — 36	7 — 36
Cat-ropes { Falls	5 — 90	5 — 90
Pennant of the Fiſh-hook rope	8 — 16	7 — 14
Fall of the ſame	5 — 35	4 — 35
Stoppers at the Bow	7½ — 52	7 — 52
Shank-painters	7½ — 48	7 — 40
Stopper of the ſtream-anchor	5½ — 13	5 — 12
Shank-painter	5½ — 12	5 — 10
Four Buoy-ropes Cablet	8½ — 100	8 — 100
Buoy-rope for the ſtream-anchor	5½ — 16	5 — 16
Buoy-rope for the Kedge Anchor, Cablet	5½ — 16	5 — 16
Pennant of the winding tackle Cablet	12 — 12	12 — 12
Slings for Ordnance	8 — 7	8 — 7
Vial. Cablet	10 — 40	9 — 36
Paſſing rope	6 — 30	6 — 30
Boat-rope, Cablet	9 — 60	8½ — 60
Gueſt-rope, Cablet	5½ — 50	5 — 50
Pinnace-rope, Cablet	6½ — 50	6 — 50
Gueſt-rope, Cablet	4½ — 40	4½ — 40
Two pair of but-ſlings	5 — 10	5 — 10
Two pair Hogſhead ſlings	4 — 8	4 — 8
Woolding for the bow-ſprit	7½ — 100	7 — 80
Woolding for the ſtem	6 — 30	5 — 30
Stoppers at bits	10 — 20	9 — 20
Laniards	4 — 20	3½ — 15
For Robins, Earings, and Cluſeazings for one compleat ſuit of Sails, of	3 — 600	
	2½ — 260	2½ — 456
	2 — 300	2 — 465
	1½ — 300	1½ — 334
	1 —	1 —

	Triumph, &c. as by the Ind. 3		*Victory, &c.* as by the Ind. 4		*Lyon, Entrance.* 5		*Providence, Expedition.* 6		*Xth Whelp.* 7		*Nicholdemus.* 8	
	Inch.	*Fath.*	*Inch.*	*Fath.*	*Inch.*	*Fath.*	*Inch.*	*Fath.*	*Inch.*	*Fath.*	*Inch.*	*Fath.*
	6	70	6	70	4½	44	4	30	3	30		
	6	9	6	9	5½	9	5	8	4½	6		
	3½	32	3½	32	3	30	2½	22	2½	16		
	6	28	6	28	5	24	4	24	4	15	3½	30
	6	24	6	24	5	20	4	20	4	12		
	4	7	4	7	3½	6	3	6				
	4	6	4	6	3½	5	3	5				
	7	100	7	100	6	76	5	72	4	64	3½	64
	5	16	4½	16	4	16	4	16				
	4½	16	4	16	3	16						
	11	11	11	11	10	10	9	9	6	12		
	8	7	8	7	8	7	8	7	7	7		
	9	30	9	30	7	20	6	20				
	6	30	6	30	5	20	4	20				
	7½	60	7	60	7	50	6	40	5	30	4½	28
	5	50	4½	50	4½	40	4	35	3½	25	3	24
	6	50	6	50	5	40						
	4	40	4	40	4	35						
	5	10	5	10	5	5	5	5	5	5	5	5
	4	8	4	8	4	8	4	8	4	4	4	4
	6	70	6	70	6	70	5	60	4½	50	4	40
	5	20	5	20	5	20						
	9	20	7	10	6	8	6	8	5	4	4½	4
	3	12	3	12	3	12	3	12	2½	8	2	8
	2½	200	2½	200								
	2	173	2	173	2	276	2	232				
	1½	276	1½	276	1½	208	1½	196	1½	100	1½	100
	1	108	1	108	1	87	1	130	1	170	1	170

Masts required to Mast and Yard any of the States Ships, in this Page.

Sovereign, Resolution,

Hands

23——1 } Main mast.
21——1 }
20——5 }
22——1 } fore mast.
20——4 }
22——1 } Bowsprit.
20——4 }
22——1 mizon mast.
21——2 main Yard.
22——1 Fore Yard.
17——1 Spritsl. yard.
17——1 mizon yard.
20——1 main topmast.
18——1 Fore topmast.
13——1 mizon topmast.
9——1 Spritsl. topmast.
15——1 main topsl. yard.
13——1 Fore topsl. yard.
10——2 } For topgallant
9——2 } Masts and Yards,
8——2 } Mizon, Crossjack,
6——2 } and topsail Yards.

Tryumph, George, Andrew, James, Swiftsure, Victory, Rainbow, Vauntguard Parragon, Unicorn,

21——1 } Main mast.
19——4 }
24——1 Fore mast.
24——1 Bowsprit.
18——1 mizon mast.
17——1 main topmast.
15——1 fore topmast.
10——1 Mizon topmast.
7——1 spritsl. topmast.
21——1 Main Yard.
19——1 fore Yard.
15——1 spritsl. Yard.
15——1 Mizon yard.
13——1 Main topsl. yard.
12——1 Fore top-sail Yard.
9——2 }
8——2 } for topgallant
7——2 } masts and yards.
6——2 }

Entrance, Lyon.

Hands.

23——1 Main mast.
Or,
19——1 } Main mast.
18——4 }
21——1 fore mast,
21——1 bowsprit.
16——1 mizon mast.
16——1 main topmast
14——1 fore topmast.
8——1 mizon topmast.
6——1 sprit topmast.
19——1 main yard.
18——1 fore yard.
14——1 Sprits yard.
14——1 mizon yard.
12——1 Main top-sail Yards.
11——1 fore topsail yard.
8——2 }
7——2 } for topgallant
6——2 } masts and yards

Masts required to Mast and Yard any of the States Ships, in the Margent.

	Hands		
Providence, Expedition.	21	1	Main mast
	19	1	fore mast
	19	1	bowsprit
	14	1	mizon mast
	14	1	main topmast
	14½	1	fore yard
	12	1	fore topmast
	7	1	mizon topmast
	16	1	main yard
	11	1	sprits. yard
	11	1	mizon yard
	10	1	main topsail yard
	9	1	fore topsail yard
	6	4	for topgal. masts.
Xth Whelp.	18	1	Main mast
	12	1	main topmast
	17	1	fore mast
	11	1	fore topmast
	17	1	bowsprit
	11	1	mizon mast
	6	1	mizon topmast
	14	1	main yard
	9	1	main topsail yard
	13	1	fore yard
	8	1	fore topsail yard
	10	1	spritsail yard
	10	1	mizon yard
Nichodemus, Henrietta pinnace	16	1	Main mast
	11	1	main topmast
	15	1	fore mast
	10	1	fore topmast
	15	1	bowsprit
	10	1	mizon mast
	12	1	main yard
	7	1	main topsail yard
	10	1	fore yard
	6	1	fore topsail yard
	6	1	spritsail yard
	6	1	mizon yard.

		Speaker, &c. 1 Inch. Fath.	*Briſtol, &c.* 2 Inch. Fath.
Bowſprit.	Sheats	3½ — 60	3 — 56
	Horſe	2½ — 4	2 — 3½
	Clulines	2½ — 34	2 — 32
	Slings for the Yard	5 — 4½	4½ — 4
	Halliards	3 — 18	3 — 18
	Lifts	3 — 40	3 — 36
	Standing Lifts	3½ — 6	3 — 5
	Laniards	2 — 4	1½ — 3
	Pennants of braces	3 — 3	2½ — 3
	Falls	2 — 64	2 — 60
	Woolding	6 — 45	4½ — 31
	Garnets	2 — 52	2 — 50
	Buntlines	2 — 28	2 — 26
Spritſ. topmaſt	Shrouds	2 — 17½	2 — 16
	Laniards	1½ — 9	1 — 8
	Pennants of braces	1½ — 4	1½ — 3
	Falls	1 — 35	1 — 32
	Tye	2½ — 2½	2 — 2
	Halliards	2 — 9½	1½ — 8
	Clulines	1½ — 36	1½ — 32
	Pennants of back-ſtaies	3¼ — 3	3 — 3
	Falls	2 — 9	2 — 9
	Lifts	1½ — 16	1 — 14
	Parrel ropes	2 — 2	1½ — 2

	Nightingale, &c. 3		*Martin, &c.* 4	
	Inch.	*Fath.*	*Inch.*	*Fath.*
	2½	50	2	30
	2	3	2	3
	2	30	1½	20
	4	3	3	2½
	2	18	2	18
	2½	36	2	24
	2½	4		
	1	2½		
	2½	2	2	2
	2	50	1½	26
	4½	31	3	30
	2	34	2	24
	2	20	1½	12
	1½	16		
	1	8		
	1	2		
	1	30		
	1½	2		
	1	7		
	1	32		
	2	2½		
	1½	8		
	1	10		
	1½	1½		

		Speaker, &c. 1		*Briſtol, &c.* 2	
		Inch.	*Fath.*	*Inch.*	*Fath.*
	Pennants of tackles	6 1/4	8	5 1/2	6
	Runners of tackles	5	24	5	22
	*F*alls of tackles	3 1/2	60	3	56
	Shrouds	6	124	5 1/2	91
	Laniards	3 1/2	50	3 1/2	35
	Stay	10 1/2	11	8 1/2	10 1/2
	Coller	9	2	7 1/2	1 1/2
	Laniard	4	8	3 1/2	7
	Puttocks	3	46	2 1/2	40
	Parrel-ropes	3	14	3	10
	Clugarnets	3	50	2 1/2	48
	Bowlines	3 1/4	50	3	40
	Bridles	3 1/2	4	3	4
Fore-Maſt	Pennants of braces	3	6	3	5
	Falls	2 1/2	50	2 1/2	40
	Buntlines	2	78	2	70
	Sheats	4 1/2	68	4	60
	Tacks	6	30	5 1/2	28
	Lifts	3	58	3	46
	Leech-lines	2 1/2	40	2	38
	Jeers	5 1/2	70		
	Legs for Catharpings	2	18	1 1/2	16
	*F*alls	2	10	1 1/2	8
	Stoppers for topſail ſheats	5	3	4	2 1/2
	Tye			5 1/2	16
	Halliards			3 1/2	50

Nightingale, &c. 3 Inches,	Fath.	Martin, &c. 4 Inch.	Fath.	
4½	4½	3½	4½	
4½	21	2½	50	Burton tackles.
2½	52			
4½	78	3½	48	
3	35	2	32	
7½	10	5	9	
5	4½	4	4	
3	7	2	6	
2	36	1½	28	
2½	10	2	7	
2	44	1½	36	
2½	32	2	32	
2½	4	2	5	
2½	4½	1½	5	
2	38	1¼	28	
2	64	1½	22	
3½	46	2½	44	
5	26	3½	26	Taper laid.
2½	42			
2	38	1½	22	
3½	28			
1½	10	1	8	
1	7	¾	6	
3½	2½	3	2	
5	13	3½	11	
3	34	2	30	

		Speaker, &c. 1		Briſtol, &c. 2	
		Inch.	Fath.	Inch.	Fath.
Fore topmaſt,	Pennant of the toprope	7	12	5	12
	Fall of the ſame	4	40	3½	38
	Shrouds	4	52	3	52
	Laniards	2	16	2	12
	Standing back-ſtaies	4	64	3½	62
	Laniards	2½	10	2	8
	Stay	4½	14	4	14
	Laniard	3	10	2½	10
	Lifts	2	50	2	50
	Puttocks	2	24	2	24
	Tye	6	7½	5	7
	Runner	4½	9½	4	9
	Halliards	3	42	2½	35
	Bowlines	2	60	2	50
	Bridles	2	10	1½	10
	Clulines	3	70	2½	65
	Pennants of tackles	3½	6	3½	5
	Falls	2	30	2	30
	Sheats	5½	46	4½	40
	Parrel-ropes	3½	6	3	6
	Leech-lines	2	14	1½	12
	Braces	2	66	2	50
	Pennants	2½	5	2½	5
	Buntlines	2	34	1½	30
Fore topgal.maſt	Stay	1½	18	1½	15
	Tye	2½	3	2	2½
	Halliards	1½	30	1½	30
	Lifts	1	20	1	20
	Braces	1	60	1	50
	Clulines	1½	60	1½	50
	Bowlines	1	60	1	50
	Bridles	1	5	1	5
	Parrel-ropes	1½	2	1½	2
	Shrouds	2	15		
	Laniards	1	6		

Nightingale, &c. 3 Inch.	Fath.	Martin, &c. 4 Inch.	Fath.	
4½	11	2½	14	to go single
3	30			
3	34	2	16	
1½	12	1	10	
3	56	2	20	
1½	8	1	4	
3½	11	2	9	
2	7	1½	6	
1½	46	1½	40	
2	24	2	6	
3½	6	2	5	
3½	8			
2	32	1½	15	
1½	48	1¼	46	
1½	8	1½	4	
2	56	1½	40	
3	4			
1½	27			
4	34	2¼	26	
2	5	1½	4	
1½	10	1	8	
1½	44	1	30	
2	3	1½	3	
1	15			
1½	2			
1	28			
1	20			
¾	30			
1	44			
¾	38			
¾	5			
1	1½			

		Speaker, &c. 1		*Briſtol, &c.* 2	
		Inch.	*Fath.*	*Inch.*	*Fath.*
Main maſt	Pennants of tackles	7	8	6	6
	Runners of tackles	5	26	5	24
	Falls of tackles	3½	60	3½	56
	Lifts	3	68	3	54
	Shrouds	7	160	6	114
	Laniards	4	56	3½	42
	Stay	12	16	11½	15
	Coller	10	7	10	5
	Laniard	4	10	4	10
	Pennant of the Garnet	5½	10	5	9
	Guy	3½	37	4½	8
	Fall of the Garnet			3½	27
	Tacks	6½	30	6	28
	Sheats	4½	70	4½	64
	Clugarnets	3	56	2½	54
	Bowlines	3	40	3	40
	Bridles	3	8	3	8
	Pennants of braces	3	6	3	6
	Falls	2½	60	2½	54
	Jeers	6	80	4½	24
	Parrel-ropes	4½	15	4	12
	Leech-lines	2½	46	2	40
	Bunt-lines	2	88	2	80
	Puttocks	3	48	2½	40
	Legs of Catharpings	2	20	2	18
	Falls	1½	19	1	16
	Stoppers for topſail ſheats	5	3	4½	3
	Two tackles to hoiſt up ſhrouds	3	20	2½	18
	Bowſing tackle	2½	10	2	10
	Tye			6	18
	Halliards			4	56

	Nightingale, &c. 3		Martin, &c. 4		
	Inch.	Fath.	Inch.	Fath.	
	5	5	4	6	
	4 1/2	24	2 1/2	50	Burton tackles in three parts.
	2 1/2	54			
	2 1/2	44	2 1/2	30	
	5	103	4	70	
	3	42	2 1/2	40	
	9 1/2	12	6 1/2	14	
	8	4	6	5	
	3 1/2	10	2 1/2	8	
	5	8	5	6	
	3 1/2	8	3	8	
	3	24	2 1/2	24	
	5 1/2	26	4	24	Taper laid.
	3 1/2	46	2 3/4	46	
	2 1/2	46	1 1/2	39	
	2 1/2	28	2 1/2	28	
	2 1/2	9	2	9	
	2 1/2	5	2	5	
	2	40	1 1/2	40	
	4	24			
	3 1/2	10	3	10	
	2	40	1 1/2	26	
	2	52	1 1/2	26	
	2	24	2	20	
	1 1/2	16	1	14	
	1	14	3/4	12	
	3 1/2	2 1/2	3	2	
	2	16	1 1/2	14	
	2	8	1 1/2	6	
	5 1/2	16	4	13	
	3 1/2	42	2 1/2	33	

		Speaker, &c. 1		*Briſtol, &c.* 2	
		Inch.	*Fath.*	*Inch.*	*Fath.*
Main topmaſt	Pennants of tackles	3½	6	3½	6
	Falls	2	34	2	34
	Shrouds	4	75	3¼	56
	Laniards	2	30	2	16
	Standing back-ſtaies	4	72	4	66
	Laniards	2½	12	2	8
	Stay	5	20	4½	18
	Laniard	3	10	2½	10
	Lifts	2	60	2	64
	Braces	2	68	2	52
	Pennants	2½	5	2½	5
	Bowlines	3½	60	3	42
	Bridles	3	10	2½	10
	Pennant of the toprope	7	13	5	12
	Fall of tht ſame	4	43	3½	40
	Clulines	3	76	3	70
	Tye	6	8½	5	7½
	Runner	4½	19	4	18
	Halliards	3	50	3	47
	Leech-lines	2	14	2	12
	Buntlines	2	38	2	32
	Puttocks	2½	34	2½	32
	Parrel ropes	3½	6	3	5
	Sheats	6	50	5	50
Main Top-gallant maſt	Stay	2	20	1½	18
	Braces	1	64	1	58
	Bowlines	1	64	1	60
	Bridles	1	5	1	5
	Parrel-ropes	1½	2	1	2
	Tye	2½	3½	2	3
	Halliards	1½	34	1½	34
	Clulines	1½	64	1½	54
	Lifts	1	22	1	22
	Shrouds	2	14		
	Laniards	1	6		

Nightingale, &c. 3 Inch.	Fath.	Martin, &c. 4 Inch.	Fath.
2½	4½		
1½	28		
3	47		
1½	16		
3½	60	2	48
1½	6	1	4
3½	15	2	20
2	10	1½	8
1½	48	1	30
1½	47	1	36
2	4	1	3
2½	40	1½	26
2½	9	1	6
4½	11	3	16
3	35		
2½	60	1½	30
4½	6	2½	15
3½	15		
2½	36	2	26
1½	10		
1½	15		
2	24		
3	5		
4½	37	3	37
1	17		
¾	44		
¾	55		
¾	5		
1	1½		
2	2½		
1½	30		
¾	12		

		Speaker, &c. 1 Inch.	Fath.	*Briſtol, &c.* 2 Inch.	Fath.
Mizon maſt	Shrouds	4	62	4	56
	Laniards	2	16	2	16
	Stay	4	11½	4	10
	Laniard	2½	3	2	3
	Halliards	3½	35	3	35
	Parrel-ropes	3½	3	3	3
	Truſs	2½	18	2	17
	Sheat	3	20	3	18
	Tack	3½	3	3	3
	Bowlines	2½	16	2	10
	Brails	2	100	1¾	90
Croſsjack	Lifts	2½	35	2½	32
	Braces	2	36	1½	29
	Standing lifts	2½	6		
	Laniards	1½	4		
Mizon Topmaſt	Shrouds	2	20	2	18
	Laniards	1½	9	1	9
	Puttocks	1½	12	2	8
	braces	1	34	1	28
	bowlines	1½	34	1	28
	Bridles	1	5	1	5
	Tye	3	4	2	3½
	Halliards	2	18	1½	15
	Lifts	1	24	1	20
	Parrel-ropes	1½	2	1½	2
	Stay	2½	8	2	7
	Clulines	1½	32	1	28

Nightingale, &c. 3 Inch.	Fath.	Martin, &c. 4 Inch.	Fath.
3	37	2	27
1 1/2	12	1 1/2	18
3	9	2 1/2	8
1 1/2	2	1	2
2 1/2	24	2	18
2 1/2	2 1/2	2	2
2	15	1 1/2	14
2 1/2	14	2	10
2 1/2	2	2	2
1 1/2	8	1 1/2	8
1 1/2	70	1 1/2	20
2	28		
1	26		
1 1/2	6		
1	4		
2	16		
3/4	8		
1 1/2	7		
3/4	26		
3/4	26		
3/4	5		
2	3		
1 1/2	15		
3/4	16		
1	1 1/2		
1 1/2	6 1/2		
1 1/2	30		

	Speaker, &c. 1 Inch.	Fath.	Briſtol, &c. 2 Inch.	Fath.
Catropes	4½	50	3½	40
Pennant of the Fiſh-hook Rope	6	7	5	7
Fall of the ſame	3¼	30	3	30
Stoppers at the bow	6	28	4½	18
Shankpainters	5	18	4½	15
Stream-anchor ſtopper	4	8	3½	8
Shankpainter	4	8	3½	7
Stoppers at the bits	9	8	8	8
Laniards	3	12	3	12
Vial	9	30	7½	28
Pennant of the winding tackle	8	10	8	9
Fall of the ſame	5	45		
Buoyropes	6½	88	5½	80
Stream-anchor buoyrope	4	30	4	30
Boat-rope and ſlings	7	37	5½	35
Gueſt-rope to it	4	32	3½	30
Pinnace rope and ſlings	6	36		
Gueſt-rope to it	4	32		
Two pair of butſlings	5	10	5	10
Two pair of Hogſhead ſlings	4	8	4	8
Ordnance ſlings	7	6	7	6
For Robins, Earings, and Cluſeazings for one compleat ſuit of Sails	1½	260	1½	200
	1	245	1	300

Nightingale, &c. 3 Inch.	Fath.	*Martin, &c.* 4 Inch.	Fath.
3½	38	3	28
3	24	2½	20
4	16		
4	14		
7	8	5	8
2½	10	2½	7
7	8		
4½	33		
5	68	4	17
		3½	48
5	33	4	30
3	28	3	28
5	10	5	10
4	8	4	8
5½	6	5	6
1½	100	1	400
1	400		

A Proportion of Boatswains Stores, for each Rank of Ships.

VIZ.

	Inches,	*Soveraign.* 1 Rank.	*Resolution.* 1 Rank.	*Naseby,* 1 Rank.
Cables of	21	7		
	20	2	7	2
	19		2	5
	18			2
	17			
	16			
	15			
	14	1		
	13		1	1
	12			
	11			
	10	2		
	9	2	2	2
	8		2	2
Cablets of	7½			
	7			
	6½			
	5	2	2	2
	4½			
	4	2		
	3½			
Hausers	8	2	2	2
	7½			
	7	2	2	2
	6	2	2	2
	5	2	2	2
	4½	2	2	2
	4	2	2	2
Coils of	3½	4	4	4
	3	4	4	4
	2½	6	4	4
	2	6	4	4
	1½	6	6	6
	1	6	6	6

Tryumph, *George*, *Andrew*, *James*, *Swiftsure*. 2. Rank.	*Victory*, *Rainbow*, *Vanguard*, *Parragon*, *Unicorn*. 2. Rank.	*Lyon*, *Entrance*. 3. Rank.	*Providence*, *Expedition*. 4. Rank.	*Whelp*. 5. Rate.	*Nichodemus*. 6. Rate.
4	2				
4	5				
		4			
		3			
			4		
1			3		
	1				
				4	
		1		2	
2					4
	2				1
			1		
		2			
1	1		2		
	1			1	
		1	1		
				1	1
1					
1	2				
2	1	2			
2	2	2	1		
2	2	1	1		
2	2	2	1	1	1
3	3	2	1	1	1
3	3	2	2	1	1
4	3	2	2	1	1
4	3	3	2	1	1
4	4	3	3	2	2
4	4	3	3	2	2

	Soveraign, Reſolution, Naſeby.	*Tryumph, George, Andrew, James, Swiftſure, Victory, Rainbow, Vauntguard, Parragon, &c.*
Laſhing-lines	6 coils	4 coils
Netting-ropes	3 coils	2 coils
Port-ropes	2 coils	1 coil
Junk of fifteen inches	60 fath.	50 fath.
Tard-lines	40	24
Tard marlin	56 l.	40 l.
White marlin	28 l.	18 l.
White twine	28 l.	20 l.
Deep Sea-lines	3	3
White lines	30	20
Cat-hooks	3	3
Fiſh-hooks	3	2
Boat-hooks	8	6
Fids of Iron	6	6
Fid Hammers	2	2
Marlin Spikes	24	18
Crows of Iron	2	2
Hatchets	8	6
Grommets and Staples	12 doz. p^{r}	8 doz pair
Sail-needles	8 dozen	6 dozen
Bilbows with ſeven ſhackles	1 pair	1 pair
Tackle-hooks	8	6
Can-hooks	2 pair	2 pair
Puttock plates	8	6
Hanging Locks	6	4
Port-nails for Hammaccoes	So many times four as hammaccoes	idem
Fire-grapnels with Chains	4	4

	Lyon, *Entrance.*	*Providence*, *Expedition.*	Fifth Rate.	Sixth Rate.
	2 coils—	1 coil—	1 coil—	1 coil—
	1 coil—	1 coil—	1 coil—	
	1 coil—			
	40 fath.	30 fath.	20 fath.	12 fath.
	18 —	12 —	6 —	6 —
	28. l. —	18. l. —	12. l. —	8. l. —
	12. l. —	8. l. —	6. l. —	4. l. —
	16. l. —	12. l. —	8. l. —	6. l. —
	3 —	2 —	2 —	2 —
	12 —	8 —	6 —	4 —
	3 —	3 —	3 —	3 —
	2 —	2 —	2 —	2 —
	6 —	4 —	3 —	3 —
	6 —	4 —	4 —	3 —
	2 —	2 —	1 —	1 —
	12 —	8 —	6 —	6 —
	2 —	1 —	1 —	1 —
	4 —	3 —	2 —	2 —
	6 doz pair	4 doz pair	3 doz pair	2 doz. pair
	4 dozen—	3 dozen—	2 dozen—	18 —
	1 pair —	1 pair —	1 pair —	1 pair —
	6 —	4 —	3 —	2 —
	2 pair —	2 pair —	1 pair —	1 pair —
	6 —	4 —	3 —	2 —
	4 —	3 —	2 —	2 —
	idem —	idem —	idem —	idem —
	3 —	2 —	2 —	

	Soveraign, Reſolution, Naſeby.	*Tryumph, George, &c.* as before,
Watch-bel of Braſs	1	1
Long-boat	1	1
Pinnace	1	1
Skiff	1	1
Boat-oars	8 dozen	6 dozen
Sounding leads	8	6
Deep Sea-leads	3	3
Compaſſes	18	12
Running Glaſſes	24	18
Steel-ſhod ſhovels	36	24
Scoops	12	8
Bowls	6	6
Wooden Buckets	24	18
Leather Buckets	36	24
Ballaſt Baskets	36	24
Tarr	3 barrels	2 barrels
Ipſwich Canvas	12 bolts	8 bolts
Hammaccoes	600	300
Waſt-cloaths of red Kerzy	1 ſuit	1 ſuit
Waſt-cloaths of red Cotton		
Spare-blocks	8 dozen	6 dozen
Deadman Eyes	2 dozen	18
Canbuoyes Iron-bound	4	3
Hand-ſpikes	3 dozen	30
Spars for Boat-hook ſtaves	6	6
Flags of 20 breadths	4	
18 breadths		2
16 breadths		
14 breadths	2	
12 breadths		2
10 breadths		
8 breadths		
6 breadths		
Standards	2	

	Lyon, Entrance.	*Providence, Expedition.*	Fifth Rate.	Sixth Rate.
	1	1	1	1
	1	1	1	1
	1			
	1	1		
	5 dozen	3 dozen	2 dozen	2 dozen
	6	5	4	4
	3	3	2	2
	10	8	6	6
	12	8	6	6
	18	16	12	10
	6	4	3	3
	4	2	2	2
	12	12	8	6
	18	12	8	6
	18	12	8	8
	2 barrels	1 barrel	½ barrel	½ barrel
	6 bolts	4 bolts	3 bolts	2 bolts
	200	120	80	50
	1 ſuit	1 ſuit	1 ſuit	1 ſuit
	4 dozen	3 dozen	2 dozen	18
	1 dozen	1 dozen	9	6
	3	3	2	2
	24	18	12	12
	4	4	3	2
	2			
		1		
	2		2	
		2		
				2

	Soveraign. Resolution. Naseby,	*Tryumph, &c.* as before.	
Ensigns of 20 breadths	4		
18 breadths		3	
16 breadths			
14 breadths			
12 breadths			
Pendents	2 dozen	6	
Spritsail Course	1	1	
Spritsail Bonnet	1	1	
Spritsail Topsail	1	1	
Fore Courses	2	2	
Fore Bonnet	1	1	
Fore Topsails	2	2	
Fore Topgallant-Sail	1	1	
Main Courses	2	2	
Main Bonnet	1	1	
Main Top-sails	2	2	
Main Topgallant-sail	1	1	
Mizon Course	1	1	
Mizon Bonnet	1	1	
Mizon Top-sail	1	1	

	Lyon, Entrance.	*Providence*, Expedition.	Fifth Rate.	Sixth Rate.
	3			
		3		
			2	2
	4	4	4	4
	1	1	1	1
	1	1	1	1
	1	1	1	1
	2	2	2	2
	1	1	1	1
	2	2	2	2
	1	1	1	1
	2	2	2	2
	1	1	1	1
	2	2	2	2
	1	1	1	1
	1	1	1	1
	1	1	1	1
	1	1	1	1

A Proportion of Carpenters Stores, for each Rank of Ships.
VIZ.

	Soveraign, Reſolution, Naſeby.	*Tryumph, George, Andrew, James, Swiftſure, Victory, Rainbow, Vauntguard, Parragon, Unicorn,*
	c. qr. l.	c. qrs. l.
Spikes	2—1—0	1—2—0
40d Nails	500—	300—
30d Nails	600—	300—
24d Nails	1500 —	1000 —
20d Nails	2000 —	1000 —
10d Nails	2500 —	1000 —
6 d Nails	3000 —	1500 —
4d Nails	3500 —	1500 —
3d Nails	4000 —	1500 —
Pump-Nails	1500 —	800—
Lead-Nails	3000 —	1500 —
Scupper-Nails	3000 —	1500 —
20d Ruffand-clench	500 pair	300 pair
Port-Nails	100—	80—
Drawn bolts	4—	2—
Ring bolts	6—	4—
Port-hooks	6—	5—
Port-hinges	6—	5—
Port-ſhackles	6—	5—
Port-ſtaples	20 —	15 —
Deadman eyes iron bound	5—	3—
Eſles for Shrouds	4—	3—
Plates for Chainwales	6—	5—
Bolts to them	6—	5—
Eyebolts	4—	3—

	Lyon, Entrance.	*Providence*, Expedition.	Fifth Rate,	Sixth Rate.
	c. qr. l.	c. qrs. l.	c. qrs. l.	c. qrs. l.
	1 — 0 — 0	0 — 3 — 0	0 — 2 — 0	0 — 1 — 0
	200	160	60	
	260	200	100	60
	800	600	300	200
	800	600	400	200
	800	600	400	300
	1000	800	600	400
	1000	800	600	400
	1000	800	600	400
	800	600	400	300
	1000	800	700	500
	1000	800	700	500
	200 pair	150 pair	100 pair	60 pair
	60	40	30	
	1	1	1	
	3	2	2	
	4	3	2	
	4	3	2	
	3	2	1	
	12	8	4	
	2	2		
	2	2	2	1
	4	3	2	
	4	3	2	
	2	2	2	

	Sovereign, Resolution, Nassby.	*Triumph, &c. as before,*	
Calking Irons	3	2	
Rother Irons	8 pair	6 pair	
Rings and Forelocks	10. l.	8. l.	
Cold Chizels	3	2	
Drive-bolts	3	2	
Setbolts	3	2	
Waſt-board Irons	36	24	
Double-headed maul	1	1	
Clench Hammers	2	2	
Hanging Clamps	4	2	
Scuttle hinges	3 pair	2 pair	
Haſps and Staples	20 pair	12 pair	
Dozen Garnets	4 pair	2 pair	
Pitch-pot of Iron	1	1	
Eſs-hinges	8 pair	4 pair	
Dovetails	4 pair	4 pair	
Hanging Locks	6	3	
Single Spring-locks	3	2	
Double Spring-locks	2	1	
Two Hand-ſaw	1	1	
Whip-ſaw	1	1	
Double White-plates	40	18	
Tempered Stuff	4 barrels	3 barrels	
Tarr	4 barrels	3 barrels	
Ballaſt Baskets	4	4	
Leather Scuppers	36	18	
Old Canvas	40 yards	30 yards	
Netting for Stage-ropes	40 fath.	30 fath.	
New Canvas	20 yards	15 yards	
White twine	½ l.	¼ l.	

Lyon, Entrance.	*Providence, Expedition.*	Fifth Rate.	Sixth Rate.
2	2	1	1
4 pair	3 pair	2 pair	2 pair
6 l.	4 l.	4 l.	
2	1	1	1
2	1	1	1
2	1	1	1
18	10		
1	1		
2	1	1	
2	2		
2 pair	2 pair		
6 pair	4 pair	3 pair	3 pair
2 pair	2 pair		
1	1	1	1
2 pair	2 pair		
2 pair	2 pair	1 pair	
2	2	2	1
2	2	1	1
1	1	1	1
1			
12	10	8	6
2 barrels	2 barrels	1 barrel	1 barrel
2 barrels	1 barrel	1 barrel	½ barrel
2	2	2	2
12	10	8	6
20 yards	15 yards	12 yards	6 yards
20 fath.	15 fath.	10 fath.	
12 yards	8 yards	4 yards	4 yards
¾ l.	¾ l.	⅓ l.	⅛ l.

	Soveraign, Reſolution, Naſeby.	*Tryumph, &c.* as before.
Leather	1 ½ back	1 back
Grind-ſtone	1	1
	C. qr. l.	C. qr. l.
Black Okam	3—0—0	2—0—0
White Okam	0—2—0	0—1—0
Sheet-Lead	2—0—0	1—2—0
Woollen thrums	0—0—20	0—0—12
Tree-nails	200	100
Smal ſparrs	20	10
Cant-ſpars	8	4
Deal boards	40	30
Elm board	400 —	250 —
Four inch Plank — Oak	50 —	30 —
Three inch Plank — Oak	80 — feet	40 — feet
Two inch Plank — Oak	100 —	50 —
Inch and half Plank — Oak	60 —	30 —
Fiſhes for Maſts	2	2
Anchor-ſtocks	3	2
Spare main topmaſt	1	1
Pump-chain Leather'd	1	1
Wheel fitted	1	1
Sprockets	10	8
Eſſes	30	20
Hooks	28	18
Swivels	15	10
Pump-hook		
Pumpbrake		
Pump-boxes		
Falling boxes		

Lyon, Entrance.	*Providence, Expedition.*	Fifth Rate.	Sixth Rate.
1/12 back	1/3 back	1/4 back	1/8 back
1	1	1	1
C. qr. l.	C. qr. l.	C. qr. l.	C. qr. l.
1—0—0	0—3—0	0—1—16	0—1—0
0—0—14	0—0—8	0—0—6	
0—3—0	0—2—0	0—1—16	0—1—0
0—0—8	0—0—6	0—0—4	0—0—3
70	60	50	25
6	4	3	2
2	1	1	
18	10	8	4
180 —	150 —	130	50 feet
20 —	12 —	— } feet	
30 } feet	20 } feet	18 }	
40 —	30 —	20	20 } feet
30 —	20 —	16	18 }
2	1	1	1
2	1	1	1
1	1	1	
1	1		
1	1		
6	4		
14	8		
10	6		
6	4		
		1	1
		1	1
		2	1
		2	1

A Proportion of *Cables* for the Frigats, and for the reſt of the Stores: they hold in all reſpects with the third, fourth, fifth, and ſixth Rates, as before.

	Inches	*Speaker, Fairfax, Torrington, Newbury, Lime Frigat Worceſter, &c.* of the 3d Rate.	*Dragon, Dover, Tigre, Advice, Elizabeth, Reſerve Phœnix, Gainsborough, Noneſuch, Adventure, Centurian, Newcaſtle, &c.* of the 4th Rate.	
Cables of	16	2		
	15	4		
	14	1	1	
	13½		2	
	13		2	
	12		1	
	11			
	10	1		
	8		1	
	7½			
	6			

	Nightingal, *Primroſe*, *Pearl*, *Meremaid*, *Baſing*, *Colecheſter*, &c. of the 5th Rate.	*Marlin*, *Drake*, *Falcon*, &c. of the 6th Rate.
	1	
	4	
		2
		1
		1

A Proportion of Anchors and Grapnels: for Frigats of the third, fourth, fifth, and sixth Ranks.

VIZ.

	C.	qr.	l.	*Speaker, Fairfax, Torrington, Newbury, Lime Frigat Worcester, &c.* of the 3d Rate.	*Dragon, Dover, Tigre, Advice, Elizabeth, Reserve, Gainsborough, Nonesuch, Adventure, &c.* of the 4th Rate.
Anchors of	27	0	0	1	
	24	0	0	1	
	23	0	0	2	
	22	0	0	1	
	18	0	0		1
	17	0	0		1
	16	0	0		2
	13	0	0		1
	11	0	0		
	10	0	0		
	9	0	0	1	
	7	0	0		1
	6	0	0		
	5	0	0		
	4	0	0	1	
	3	2	0		1
	3	0	0		
	2	2	0		
Grapnels	1	2	0	1	
	1	0	0		1
	0	2	0	1	1
	0	1	12	1	1

	Nightingal, *Primroſe*, *Pearl*, *Mermaid*, *Baſing*, *Colecheſter*, &c. of the 5th Rate.	*Marlin*, *Drake*, *Falcon*, &c. of the 6th Rate.
	2	
	1	
	1	
		1
		2
		1
	1	
		1
	1	
		1

A Proportion of Anchors for the Ships in the Margent.

		C.	qr.	l.		
Soveraign	Anchors of	60	0	0	1	These be her preſent Anchors, but if ever the Ship want any more, it is adviſed that the leaſt be 55. C. weight.
		55	0	0	1	
		54	0	0	1	
		45	0	0	2	
		44	0	0	1	
		43	0	0	1	
	Stream Anchor	24	0	0	1	
	Kedgers of	8	0	0	1	
		5	0	0	1	
	Boats Anchors	3	2	0	1	
	Pinnace Grapnel	1	0	0	1	
	Skiffs Grapnel	0	3	0	1	
Reſolution	Anchors of	42	0	0	2	Theſe be her Anchors at preſent, but if ſhe want any more, it is adviſed that the leaſt be 50. C. weight.
		40	0	0	2	
		39	0	0	2	
	Stream Anchor	20	0	0	1	
	Kedgers of	7	0	0	1	
		5	0	0	1	
	Boats Anchor	2	0	0	1	
	Pinnace Grapnel	0	3	0	1	
	Skiffs Grapnel	0	2	0	1	
Naſeby Frigat	Anchors of	46	0	0	2	
		44	0	0	2	
		42	0	0	2	
	Stream Anchor	18	0	0	1	
	Kedgers of	6	0	0	1	
		4	0	0	1	
	Long-boats Anch.	1	2	0	1	
	Pinnace Grapnel	0	3	0	1	
	Skiffs Grapnel	0	2	0	1	

A Proportion of Anchors for the Ships in the Margent.

		C.	qr.	l.	
Tryumph, George, Andrew, James.	Anchors of	36	0	0	1
		34	0	0	2
		32	0	0	2
	Stream Anchor	12	0	0	1
	Kedger of	4	0	0	1
	Boats Anchor	1	1	0	1
	Pinnace grapnel	0	3	0	1
	Skiffs grapnel	0	2	0	1
Swiftsure, Victory, Rainbow, Vauntguard, Parragon, Unicorn.	Anchors of	32	0	0	1
		30	0	0	2
		28	0	0	2
	Stream Anchor	11	0	0	1
	Kedger	3	2	0	1
	Boats Anchor	1	0	0	1
	Pinnace grapnel	0	3	0	1
	Skiffs grapnel	0	2	0	1
Lyon, Entrance.	Anchors of	28	0	0	1
		25	0	0	2
		24	0	0	2
	Stream Anchor	9	0	0	1
	Kedger	2	3	0	1
	Boats Anchor	0	3	0	1
	Pinnace grapnel	0	2	0	1
	Skiffs grapnel	0	1	12	1
Providence, Expedition.	Anchors of	18	0	0	1
		17	0	0	2
		16	0	0	2
	Stream Anchor	5	0	0	1
	Kedger Anchor	2	2	0	1
	Boats Anchor	0	3	0	1
	Pinnace grapnel	0	2	0	1
Xth Whelp.	Anchors of	12	0	0	1
		10	0	0	2
		9	0	0	1
	Stream Anchor	5	0	0	1
	Kedger of	2	0	0	1
	Boats Grapnel	0	3	0	1
Nichodemus, Eagle.	Anchors of	5	0	0	1
		4	0	0	1
		3	2	0	1
	Pinnace Grapnel	0	2	0	1

The Weight of Cordage.

	Inches.	C.	qrs.	l.
Cables of	21	90	0	0
	20	80	0	0
	19	70	0	0
	18	66	0	0
	17	59	0	12
	16	53	2	7
	15	46	0	7
	14½	43	3	7
	14	40	2	0
	13	34	0	18
	12	29	2	0
	11	25	2	7
	10½	24	2	0
	10	20	3	4
	9	17	3	13
	8	13	3	7
Cablets of	7½	10	3	0
	7	9	3	22
	6½	8	1	16
	6	7	1	0
	5½	6	3	5
	5	5	3	12
	4½	4	2	9
	4	3	3	0
	3½	3	1	0
	3	2	3	0
Haufers of	8	16	1	6
	7½	13	0	7
	7	11	1	21
	6½	9	3	7
	6	9	0	14
	5½	7	1	24
	5	6	1	7
	4½	5	0	16
	4	4	2	21
Coils of	3½	2	2	21
	3	2	1	14
	2½	1	2	21
	2	1	0	21
	1½	0	2	21
	1	0	1	21

Some Obſervations touching Cordage, and Rope-makers.

Cables and Cablets of

Inches.	Thrids on a Hook, as in this Column.	Thrids in the Hauſer.	Size of the Hauſer. *Inches.*	Thrids in the Cable.
20	252	756	11	2268
19	168	504	10½	1512
18	156	468	9¾	1404
17½	148	444	9¼	1332
17	140	420	9	1260
16½	132	396	8¾	1188
16	126	378	8½	1134
15½	118	354	8¼	1062
15	110	330	8	990
14½	106	318	7¾	950
14	100	300	7½	900
13½	92	286	7	858
13	84	252	6¾	766
12½	80	240	6½	720
12	76	228	6¼	684
11½	72	216	6	648
11	68	204	5¾	612
10½	60	180	5½	567
10	56	168	5¼	514
9½	50	150	5	450
9	46	138	4¾	414
8½	38	114	4½	342
8	34	102	4¼	306
7½	30	90	4	270
7	26	78	3¾	234
6½	23	69	3½	207
6	19	57	3¼	171
5½	16	48	3	144
5	14	42	2¾	126
4½	12	36	2½	108
4	9	27	2¼	81
3½	8	24	2	72
3	7	21	1¾	63

Hauſers and Coils of

8½	124	372
8	100	300
7½	92	276
7	84	252
6½	78	234
6	66	198
5½	48	144
5	44	132
4½	39	117
4	32	128
3½	24	72
3¼	22	66
3	17	41
2½	9	27
2	8	24
1½	7	21
1	3	9

Note, One Tun of Hemp, requires three Barrels of Tar.

c. qr. l.

One Barrel of Tar weighs 2. 1. 0.

The waſt in 1. C. of hemp, ariſing by duſt, ſheeves and tows, in { *Ruſsband* 7. l. *Rhinband* 4. l.

That every Rope-maker, if it be not a ſhort winters day, ſpins, or ought to ſpin of { *Rhinband* 77. l. *Ruſsband*, 63.

Viz. From the firſt of *November*, to the ſecond of *Febr.* 70. l. *per diem*. And from that time to the laſt of *October*, 77. l. *per diem*, Rhine Hemp.

Dimenſions of Boats for the Ships.

		Length, Feet, Inch.	Breath, feet, inch.	Depth feet, inch.
Soveraign,	Long-boat	50—10	12—6	4—3
	Pinnace	36— 0	9—6	3—3
	Skiff	27— 0	7—0	3—0
Reſolution,	Long-boat	44—8	11—0	4—0
	Pinnace	34—0	7—0	3—1
	Skiff	25—0	6—6	2—9
Tryumph, James.	Long-boat	38—0	10—9	4—2
	Pinnace	31—0	6—8	3—0
	Skiff	24—0	6—3	2—6
The reſt of the 2d Rate Ships.	Long-boat	35—0	9—6	3—7
	Pinnace	29—0	7—0	2—8
	Skiff	20—0	6—0	2—5
Third Rate.	Long-boat	33—0	8—6	3—4
	Pinnace	28—0	7—2	3—0
	Skiff	20—0	6—0	2—5
Fourth Rate	Long-boat	29—6	9—0	2—11
	Pinnace	22—0	6—0	2—3
Fifth Rate,	Longboat	24—10	7—9	2—10
Sixth Rate	Boat	22—0	6—8	2—7

Petty Provisions for Boatswains Sea-stores, (Cordage, Anchors, Sails, Kettles, and Boats, excepted) their Valuations upon the several Rates of Ships. VIZ.

Rank	l.	s.	d.	
1	331	09	5	*According to the present Rate of Provisions.*
2	204	16	8	
3	150	00	0	
4	123	15	8	
5	115	00	0	
6	66	00	0	

The Valuation of Carpenters Stores, upon each Rank of Ships.

Rank.	l.	s.	d.	
1	100	00	0	*A neer estimate according to the present Rates of Provisions.*
2	50	00	0	
3	35	00	0	
4	32	00	0	
5	30	00	0	
6	20	00	0	

The Weight of the Riggings, for each Rank of Ships.

	Tuns	C.	qr.	l.
Soveraign	33	0	0	0
Resolution	29	11	2	15
The greatest second Rate Ships	22	12	1	5
The rest of the second Rate Ships	18	1	3	24
The third Rate Ships	11	1	0	25
The fourth Rate Ships	8	5	2	19
The fifth Rate Ships	4	12	2	17
The sixth Rate Vessels	1	12	2	11

Canvas to make each of the States Ships one ſuit of Sails, and the quantity in each particular Sail.

		Yards
Sovereign.	Spritſail Courſe, and Bonnet, Noyans Canvas	308
	Spritſail topſail, Ipſwich warp't	192
	Fore courſe, and bonnet; Ipſwich double	1230
	Fore topſail, Noyans	482
	Fore topgallant-ſail, Vittery	130
	Main courſe and bonnet, Ipſwich double	1640
	Main topſail, Noyans	721
	Main topgallant-ſail, Warp't Ipſwich	180
	Mizon courſe and bonnet, Noyans	430
	Mizon topſail, Ipſwich Warp't	200
Reſolution.	Spritſail courſe and bonnet, Noyans	286
	Spritſail topſail, Ipſwich warp't	180
	Fore courſe and bonnet, Ipſwich double	900
	Fore topſail, Noyans	388
	Fore topgallant-ſail, Ipſwich warp't	104
	Main courſe and bonnet, Ipſwich double	1232
	Main topſail, Noyans	576
	Main topgallant-ſail, Ipſwich warp't	135
	Mizon courſe and bonnet, Noyans	277
	Mizon topſail, Ipſwich warp't	156
Tryumph, James, George, Andrew, Swiftſure.	Spritſail Courſe and Bonnet, Noyans	210
	Spritſail topſail, Ipſwich	136
	Fore courſe and bonnet, Ipſwich double	858
	Fore topſail, Noyans	310
	Fore topgallant ſail, Vittery	55
	Main courſe and bonnet, Ipſwich	1176
	Main topſail, Noyans	449
	Main topgallant ſail, warp't Ipſwich	97
	Mizon courſe and bonnet, Noyans	216
	Mizon topſail, warp't Ipſwich	112

Canvas to make each of the States Ships one ſuit of Sails, and the quantity in each particular Sail.

		Yards
Victory, Rainbow, Vauntguard, Parragon, Unicorn.	Spritſail Courſe and Bonnet, Noyans	187
	Spritſail topſail, Ipſwich	136
	Fore courſe and bonnet double, Ipſwich	810
	Fore topſail, Noyans	283
	Fore topgallant ſail, Vittery	50
	Main courſe and bonnet, Ipſwich	1100
	Main topſail, Noyans	418
	Main topgallant-ſail, Warp't Ipſwich	86
	Mizon courſe and bonnet, Noyans	221
	Mizon topſail, Warp't Ipſwich	96
Entrance. Lyon.	Spritſail courſe and bonnet, Noyans	108
	Spritſail topſail, Ipſwich Warp't	91
	Fore courſe and bonnet, Ipſwich ſingle	264
	Fore topſail, Noyans	204
	Fore topgallant ſail, Vittery	35.
	Main courſe and bonnet ſingle, Ipſwich	372
	Main topſail, Noyans	300
	Main topgallant-ſail warp't Ipſwich	49
	Mizon courſe and bonnet, Noyans	142
	Mizon topſail warp't, Ipſwich	53
Providence, Expedition.	Spritſail courſe and bonnet, Noyans	97
	Spritſail topſail, Vittery	68
	Fore courſe and bonnet, Ipſwich, ſingle	253
	Fore topſail, Noyans	173
	Fore topgallant ſail, Vittery	33
	Main courſe and bonnet ſingle, Ipſwich	324
	Main topſail, Noyans	234
	Main topgallant ſail, Vittery	39
	Mizon courſe and bonnet, Noyans	108
	Mizon topſail warp't, Ipſwich	46

Canvas to make each of the States Ships one ſuit of Sails, and the quantity in each particular Sail.

		Yards
X^th Whelp.	Spritſail Courſe, Noyans	60
	Spritſail topſail, *Vittery*	44
	Fore courſe, and bonnet; Ipſwich ſingle	157
	Fore topſail, Noyans	108
	Fore topgallant-ſail, Vittery	16
	Main courſe and bonnet, ſingle, Ipſwich	231
	Main topſail, Noyans	172
	Main topgallant-ſail, *Vittery*	25
	Mizon courſe and bonnet, Noyans	82
	Mizon topſail, *Vittery*	30
Nithodemus.	Spritſail courſe, Noyans	36
	Spritſail topſail, *Vittery*	30
	Fore courſe and bonnet, Ipſwich	109
	Fore topſail, Noyans	64
	Fore topgallant-ſail, *Vittery*	14
	Main courſe and bonnet, Ipſwich	192
	Main topſail, Noyans	108
	Main topgallant-ſail, *Vittery*	24
	Mizon courſe, Noyans	54
	Mizon topſail, *Vittery*	26
Hen. pinnace.	Spritſail Courſe, Noyans	36
	Spritſail topſail, *Vittery*	30
	Fore courſe and bonnet, Ipſwich	96
	Fore topſail, Noyans	53
	Fore topgallant ſail, Vittery	14
	Main courſe and bonnet, Ipſwich	170
	Main topſail, Noyans	85
	Main topgallant ſail, *Vittery*	24
	Mizon courſe, Noyans	45
	Mizon topſail, *Vittery*	26

A neer Estimate of the Charge of one compleat suit of Sails, for each Rank of Ships.

	l.	s.	d.
Soveraign	404	00	0
Resolution	350	00	0
Tryumph	241	00	0
James	237	00	0
Rainbow	223	00	0
Unicorn	220	00	0
Entrance	136	00	0
Expedition	106	00	0
X^th^ Whelp	82	00	0
Nichodemus	50	00	0

In what Yeer, many of the States Ships were built.

Soveraign	1637	
Resolution	1641	
Tryumph	1623	
George	1622	
Andrew	1622	
Vauntguard, *rebuilt*	1630	
Swiftsure	1621	but since rebuilt.
Rainbow	1617	
Victory	1620	
Parragon	1632	
Unicorn	1633	
James	1633	
Entrance	1619	
Lyon	1640	
Providence	1637	
Expedition	1637	
X^th^ Whelp	1628	
Nichodemus	1636	
Henrietta Pinnace	1634	

The rest of the Ships and Frigats were built so lately, that, there needs no Record; every one may easily call to mind their Age.

The Weight of each Ships Sea-ſtore in point of Ground Tackle, and other Cordage.

	Tuns,	C.	qrs.	l.
Soveraign	60	8	2	14
Reſolution	50	12	2	0
Tryumph, and other ſhips as before, of her Rank	36	13	2	21
Victory, and the reſt of the ſecond Rank	28	4	3	14
Entrance	22	3	0	0
Providence	16	5	3	21
X^th^ Whelp	8	7	2	7
The ſmal Pinnaces	5	7	3	7

A Rule for Main-Maſts, and for ſizing of Shrouds and Staies.

It muſt be half the length of the Keel, and once the length of the Beam; put them together, and ſo long muſt your Main Maſt be.

Then for ſmal Veſſels, three times the length of the Beam, from the Hounds downwards, that ought to be the length of the main Maſt.

And look how many Inches your main-maſt is through, your main-ſtay is to be half of that about, or half ſo many Inches as your maſt is ~~board~~ through, and let your ſhroud be as the one half of your ſtay in ſize; and the topmaſt ſhrouds as the one half of the main ſhroud.

Mr. Brigges, *and Mr.* Wells, *their Rule for the meaſuring of Ships.*

1 Take the length of the Keel, leaving out the falſe Poſt, if there be any.

2 Take the depth of the Ship, from the greateſt breadth to the Foot-waling, by the Keel within boord.

3 At half the depth, take the breadth of the ſhip within the Seeling, which is called by them, the main breadth.

Theſe three Dimenſions being multiplied together, and the ſolid number divided by 65. the Quotient gives the content in Tuns, unto which add the third part, ſo have you the tuns and tunnage.

I had a full reſolution to enlarge this Book, with the ſeveral Particulars following upon the ſame Subject, *viz.* to lay down,

The Allowances to Ships in Harbor, in reference to Boatſwains and Carpenters.

What lengths of Cables are required to moor any of the States ſhips in Harbor at *Chatham* and *Portsmouth*.

The ſcantlins, number, and ſpecies of Blocks and Deadman Eyes, required to the Rigging of any of the States ſhips.

The Circumference of each ſhips tops.

The length, breadth, depth, and burden of the States ſhips.

The lengths of all the ſhips maſts and yards.

The Cloaths, and depths of every ſhips ſail.

The weight of every ſhips ſail.

The quantity of Canvas in each Frigats ſail: and this particular I intended ſhould be in the Book, but forgot to enter it in its proper place, and therefore omitted it purpoſely.

Each ſhips draught of Water.

Maſts required to maſt and yard all the Frigats.

Other things I might have added, but fear this Subject may be tedious, eſpecially to thoſe Honorable Perſonages imployed in the weighty Affairs of the Nation, and therefore conclude my pains.

FINIS.